Meeting Minutes Transmittal/Approval
Unit Manager's Meeting: Remedial Action and Waste Disposal Unit/Source Operable Unit
3350 George Washington Way, Room 1B45, Richland, Washington
May 16, 1996

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FROM/APPROVAL: N/A Date _____
Nancy Werdel/Glenn Goldberg, 100 Area Unit Managers, RL (H0-12)

APPROVAL: N/A Date _____
Wayne Soper/Keith Holliday, 100 Aggregate Area Unit Manager, Ecology (B5-18)

APPROVAL: N/A Date _____
Dennis Faulk/Kevin Oates, 100 Aggregate Area Unit Managers, EPA (B5-01)

APPROVAL: Robert G. McLeod Date Jun 20, 1996
Robert G. McLeod, 300 Area Unit Manager, RL (H0-12)

APPROVAL: Jeanne Wallace Date 7/19/96
Jeanne Wallace, 300 Area Aggregated Area Unit Manager
WA Dept of Ecology (B5-18)

APPROVAL: David R. Einan Date 20 Jun 96
David R. Einan, 300 Area Aggregated Unit Manager, EPA (B5-01)

Meeting Minutes are attached. Minutes are comprised of the following:

| | | |
|---|---|---|
| Attachment #1 | - | Agenda |
| Attachment #2 | - | Attendance Record |
| Attachment #3 | - | Meeting Minutes |
| Attachment #4 | - | Status Package |
| Attachment #5 | - | 300-3 Aluminum HydroxideWaste Site Data |
| Attachment #6 | - | 300-FF-1 Area Status |
| Attachment $7 | - | 300-FF-2 Area Status |

Prepared by: _____ Date 7/24/96
Gary Gesell/Tamen Lundquist (H0-17)

Concurrence by: _____ Date 7/26/96
Vern Dronen, BHI Remedial Action and Waste Disposal Project Manager (H0-17)

# MAY 1996 UMM AGENDA

**1:00 p.m. 300 Area**

- Review of April Minutes/Signatures
- Status Package Review
- 300-FF-1 ROD Status
- 300-FF-1 Remedial Design Status
- 300-FF-2 Groundwater Update
- Open Discussion

**2:00 p.m. 100 Areas**

- Review of April Minutes/Signatures
- Status Package Review
- 116-B-4 and 116-B-5 Cleanup Verification Package Status
- SAP and RDR/RAWP Status
- 100-B/C Remedial Action Schedule Review
- Waste Site Reclassification Process
- RCRA TDS Waste to ERDF
- 190-C Status (EPA and Ecology)
- 100-IU-2 and 100-IU-6 Focus Package
- 100-IU-2 and 100-IU-6 Determination of Lead Regulatory Agency
- Results of 1907-DR Process Sewer Outfall Soil Sampling
- Open Discussion

**3:30 Close**

**NOTE:** The 200 Areas is not on the agenda for this month. The 200 Areas has been conducting a series of workshops that will replace the UMM this month. Ecology, EPA, and DOE have been participating in these workshops to develop a revised 200 Areas strategy to streamline the characterization implementation process and prioritization of 200 Area activities.

**Remedial Action and Waste Disposal Unit Manager's Meeting**
**Official Attendance Record**
**May 16, 1995**

Please print clearly and use black ink

| PRINTED NAME | ORGANIZATION | O.U. ROLE | TELEPHONE |
|---|---|---|---|
| Randy Bricht | RL | Acting PM | 376-9031 |
| Ted Wooley | Ecology | Unit Manager | 736-3012 |
| Dave Einan | EPA | PM | 376-3883 |
| Charlie Johnson | BHI | PM | 372-9603 |
| Richard Carlson | BHF | Engr. Lead | 372-9623 |
| Nancy Wardel | DOE | PM | 376-5500 |
| Clarence Corriveau | ~~BHI~~ | Eng. | 375-0807 |
| J. R. James | BHI | Task Lead | 372-9563 |
| Glenn Van Sickle | BHI | Task lead | 372-9571 |
| Chuck Heded | ERC | Team Lead | 372-9637 |
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# Unit Managers' Meeting Minutes
# May 16, 1996

## General Information

No comments were provided regarding the Meeting Minutes or Status Package for April 1996.

## 100 AREAS

Because of low attendance, the meeting was canceled.

## 300 AREA

### Action Item

Provide a copy of the 100-B/C SAP to DOE, EPA, and Ecology; completed on April 23, 1996.

### 300-FF-1 and 300-FF-5 ROD Status

- The majority of new text for the ROD has been completed and is progressing well. The EPA will send a redline/strikeout version to DOE by the first of next week (May 20, 1996) to provide a brief review before seeking approvals.

- Revision of Appendix C of the Tri-Party Agreement was discussed. The EPA suggested changing the boundary of the 300-FF-5 Operable Unit to make it coincide with the existing groundwater contamination plume. The EPA also identified that an error was made in defining the 300-FF-1 boundary change per the approved Document Change Control Form (300-FF-1-25) signed in June 1992. The Tri-Party Agreement needs to be revised to reflect the actual condition for the 300-FF-1 boundary and the 300-FF-5 proposed boundary change, if agreed upon.

### 300-FF-1 Remedial Design

- Overall, the remedial design was given a good response; there were some delinquent comments that were submitted to WASTREN; therefore, they do not have to be incorporated.

- Several DQO meetings have been held in April and May 1996.

- The DQO is ongoing and effects the level of completeness of the SAP for the 60% design package.

- The 60% design review starts on June 3, 1996. The design review presentation is tentatively scheduled for June 4, 1996 (mid-morning); comments are due by COB June 12, 1996.

- The R Design Report/Remedial Action Work Plan (RDR/RAWP) is being prepared. The ERC internal review is planned for June 4 to June 17, 1996.

**300-FF-5 O&M Plan**

The O&M Plan is complete, except for clarifying point of compliance and action levels. The DQO will need to be reopened to finalize these decisions before the O&M Plan is complete.

**General Information**

The 300-3 Aluminum Hydroxide waste site found in the 300-FF-1 Operable Unit after the RI was completed, during the 300 Area TEDF pump station installation. Samples were taken of the material, and no hazardous or radioactive contamination was found above cleanup standards. However, this data were not entered into the Administrative Record and is being done so now as an attachment to this set of meeting minutes.

**Forecasted Activities**

- Continue to support the 300-FF-1 and 300-FF-5 ROD.

- Continue remedial design for 300-FF-1
  - 90% design review starts on July 8, 1996
  - RDR/RAWP is scheduled for concurrent DOE/regulator review from July 8 to August 6, 1996.

- Start 300-FF-1 remedial action planning. The field superintendent is looking at office space, trailer needs, etc., before the contractor comes on board.

- Meet with regulators on the 300-FF-2 groundwater data for the 316-4 Crib and 618-10 Burial Ground.

# STATUS PACKAGE

## UNIT MANAGERS' MEETING - MAY 1996

## SOURCE OPERABLE UNITS

100-B/C, 100-K, 100-D, 100-H, 100-F

200 AREAS

300 AREA

prepared by

DOE-RL

# 100 AREAS

**Focused Feasibility Studies and Proposed Plans**

100 Area Remaining Sites ESD - In project meetings held during March, an Explanation of Significant Differences (ESD) and/or ROD amendment were discussed by the U.S. Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) to address some of the remaining 100 Area radioactive liquid waste sites by attaching them to the current Record of Decision (ROD) for the 100 Areas. This approach is consistent with the strategy presented in EPA and Ecology's February letter concerning RODs for the 100 Areas. Ecology and EPA have tentatively agreed to RL's list of 34 radioactive liquid waste disposal sites that are proposed for inclusion in the initial ESD. RL is now considering expanding the ESD to include disposal authorization for two ESDs (183-H and D-Ponds) and all 100 Areas IDW. The EPA has expressed concern that the ESD is becoming too complex and that a ROD amendment might be more appropriate. They have indicated that a ROD amendment should entail essentially the same amount of work and schedule time as an ESD.

Correspondence from EPA to the U.S. Department of Energy (DOE), Richland Operations Office (RL) received in late March, however, indicated that prioritization of EPA's work load has resulted in their inability to address this (and several other) DOE projects. This will likely result in a delay to this effort beyond the initial goal of June 1996 for the start of public comment.

100-IU-1/100-IU-3/100-IU-4/100-IU-5 PP - Following the signing of the "no action" ROD in February 1996, an action remains to close out the bioremediation of soil from 100-IU-1 that is stockpiled at 100-B/C. DOE has submitted a data summary indicating that adequate bioremediation has occurred, and that use of the soil is not restricted. A site visit was made by RL, EPA, and ERC on May 6, 1996, to check the stockpile for evidence of organic vapors; no vapors were detected. Based on the data summary and the results of the site visit, RL is awaiting direction from EPA and concurrence from Ecology to conclude the bioremediation effort.

100-IU-2 and 100-IU-6 - A Draft Redline Rev. 0 Focus Package documenting the proposed dispositions of the sites was submitted by RL to EPA and Ecology on March 5, 1996. The joint EPA/Ecology letter on the *100 Area Record of Decision Strategy* recommended that the 100-IU-2 and 100-IU-6 Operable Units (OU) be addressed through Washington State regulations (e.g., solid waste regulations) rather than CERCLA. The advantages and disadvantages of the regulators' proposal remain to be discussed. Some issues to consider include CERCLA documentation completed to date and a December 31, 1996, *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) milestone for the submittal of "planning documents."

100-KR-1/100-KR-2/100-FR-1/100-FR-2/100-BC-2 - Work has been suspended on focus feasibility studies (FFS) and proposed plans (PP) for these OUs since receiving a letter from EPA (October 20, 1995), requesting RL to stop work on these documents. The request to stop work was made in anticipation of reaching a Tri-Party Agreement in the near future to address remaining waste sites in the 100 Areas on a 100-Area-wide basis, rather than on an operable-unit-specific basis. Some high-priority radioactive liquid effluent disposal sites located in these OUs are candidates for the proposed June 1996 ESD (discussed above).

100-DR-2/100-HR-2 - Work has been suspended on FFSs and PPs for these OUs since receiving a letter from Ecology (November 29, 1995), requesting RL to stop work on these documents. The request to stop work was made in anticipation of reaching a Tri-Party Agreement in the near future to address remaining waste sites in the 100 Areas on a 100-Area-wide basis, rather than on an operable-unit-specific basis. Some high-priority radioactive liquid effluent disposal sites located in these OUs are candidates for the proposed June 1996 ESD (discussed above).

**100 B/C**

100-BC-1 ERA - The *100-B/C Demonstration Project Final Report* was issued in March. The verification package for 116-B-4 was completed and forwarded to EPA for concurrence. The verification package for 116-B-5 was prepared for DOE and EPA concurrence. The 116-B-4 French Drain was backfilled to grade with clean material on April 5. This action was necessary to prevent sloughing of the side walls and cave-in.

### B/C Area

Remedial Design - Detailed design is complete for all sites in 100-BC-1 (116-B-1, 116-B-11, 116-B-13, 116-B-14, 116-C-1, 116-C-5, and the B/C north pipelines), two sites in 100-DR-1 (116-D-1A, 116-D-1B), and one site in 100-HR-1 (116-H-1). The Draft Remedial Design Report/Remedial Action Work Plan was provided for regulatory review on April 2, 1996. The Sampling and Analysis Plan was drafted and provided for regulatory review on April 5, 1995. Comments were received from EPA and Ecology on May 1, 1996.

Remedial Action - The bid evaluation was completed, and the subcontract was awarded to Envirocon on April 26, 1996. Mobilization and site set-up is expected to begin in May.

## 200 AREAS

### 200-UP-2 Operable Unit

200-UP-2 FFS - The 200-UP-2 FFS is currently undergoing DOE and regulatory review. Comments were received from RL and HQ. Ecology requested a 30 working day extension to complete their review of the FFS. The proposed plan was transmitted Ecology on April 22, 1996, for review. Transmittal to the regulators fulfills Tri-Pary Agreement Milestone M-15-15E, due April 30, 1996.

Barrier FFS - A comment resolution meeting was held on April 4, 1996, to resovle regulator comments on Draft B. Rev. 0 is scheduled to be issued to RL on May 13, 1996.

### 200 Areas Strategy

Several working meetings were held between the Tri-Parties to continue the development of a 200 Area Assessment and Remedial Action Strategy. Progress has been made in several areas, including streamlining the RI/FS process for application at the 200 Areas. In addition, several of the 200 Area project managers attended a field trip to the 200 Areas to obtain a better understanding of the magnitude of work that needs to be conducted. A working draft of the 200 Area strategy document is scheduled to be prepared by May 15, 1996.

## 300 AREA

### 300-FF-1 Operable Unit

Record of Decision - The ERC and DOE-RL have provided comments to EPA on the draft ROD. The project schedule is based on a completed ROD by May 14, 1996.

Remedial Design - The 30% design was submitted on schedule, reviewed, and comments returned to the design subcontractor on schedule. Comments on the 30% design package were recieved from the ERC, DOE, EPA, and Ecology. The subcontractor is proceeding on schedule for submittal of the 60% design package with the review starting on June 3, 1996. A third DQO session was held regarding remedial action cleanup decisions. One to two more sessions are expected to reach closure of the DQO.

### 300-FF-2 Operable Unit

RI/FS Work Plan/ LFI Report - ERC review of the draft report began on May 13, 1996. Comments are due May 17. Groundwater sampling from 699-S6-E4A was completed on April 3 with the use of appropriate respiratory protection. Data from this well has also been prioritized at the laboratory. Priority data from the two CPT

borings was delivered to the ERC on April 16, followed on April 22 by the data from well 699-S6-E4A. The remaining data that was not prioritized is scheduled for delivery on May 13.

**300-FF-5 Operable Unit**

Operations and Maintenance Plan - The O&M plan is essentially complete, as stated last month. However, there is a need to reopen the DQO and have one more session to finalize discussions regarding point of compliance monitoring details.

| SAMPLE | CAS # | ANALYTE | DATE | RESULT | UNITS | QUAL | QUAL2 |
|---|---|---|---|---|---|---|---|
| B09DN7 | 7429-90-5 | Aluminum | 10/22/93 | 255000 | mg/kg | | |
| B09DN7 | 7429-90-5 | Aluminum | 10/22/93 | 255000 | mg/kg | | |
| B09DN8 | 7429-90-5 | Aluminum | 10/22/93 | 264000 | mg/kg | | |
| B09DN8 | 7429-90-5 | Aluminum | 10/22/93 | 264000 | mg/kg | | |
| B09DN9 | 7429-90-5 | Aluminum | 10/22/93 | 292000 | mg/kg | | |
| B09DN9 | 7429-90-5 | Aluminum | 10/22/93 | 292000 | mg/kg | | |
| B09DN7 | 7440-36-0 | Antimony | 10/22/93 | 1.1 | mg/kg | N | U |
| B09DN7 | 7440-36-0 | Antimony | 10/22/93 | 1.1 | mg/kg | N | U |
| B09DN8 | 7440-36-0 | Antimony | 10/22/93 | 1.1 | mg/kg | N | U |
| B09DN8 | 7440-36-0 | Antimony | 10/22/93 | 1.1 | mg/kg | N | U |
| B09DN9 | 7440-36-0 | Antimony | 10/22/93 | 2.6 | mg/kg | N | B |
| B09DN9 | 7440-36-0 | Antimony | 10/22/93 | 2.6 | mg/kg | N | B |
| B09DN7 | 7440-38-2 | Arsenic | 10/22/93 | 11.7 | mg/kg | N | U |
| B09DN7 | 7440-38-2 | Arsenic | 10/22/93 | 11.7 | mg/kg | N | U |
| B09DN8 | 7440-38-2 | Arsenic | 10/22/93 | 32.4 | mg/kg | WN | B |
| B09DN8 | 7440-38-2 | Arsenic | 10/22/93 | 32.4 | mg/kg | WN | B |
| B09DN9 | 7440-38-2 | Arsenic | 10/22/93 | 3.8 | mg/kg | N | B |
| B09DN9 | 7440-38-2 | Arsenic | 10/22/93 | 3.8 | mg/kg | N | B |
| B09LQ0 | 7440-38-2 | Arsenic | 10/22/93 | 100 | ug/L | U | |
| B09LQ0 | 7440-38-2 | Arsenic | 10/22/93 | 100 | ug/L | U | |
| B09DN7 | 7440-39-3 | Barium | 10/22/93 | 16.7 | mg/kg | | B |
| B09DN7 | 7440-39-3 | Barium | 10/22/93 | 16.7 | mg/kg | | B |
| B09DN8 | 7440-39-3 | Barium | 10/22/93 | 11.2 | mg/kg | | B |
| B09DN8 | 7440-39-3 | Barium | 10/22/93 | 11.2 | mg/kg | | B |
| B09DN9 | 7440-39-3 | Barium | 10/22/93 | 9.4 | mg/kg | | B |
| B09DN9 | 7440-39-3 | Barium | 10/22/93 | 9.4 | mg/kg | | B |
| B09LQ0 | 7440-39-3 | Barium | 10/22/93 | 464 | ug/L | | |
| B09LQ0 | 7440-39-3 | Barium | 10/22/93 | 464 | ug/L | | |
| B09DN7 | 7440-41-7 | Beryllium | 10/22/93 | 0.04 | mg/kg | | B |
| B09DN7 | 7440-41-7 | Beryllium | 10/22/93 | 0.04 | mg/kg | | B |
| B09DN8 | 7440-41-7 | Beryllium | 10/22/93 | 0.02 | mg/kg | | U |
| B09DN8 | 7440-41-7 | Beryllium | 10/22/93 | 0.02 | mg/kg | | U |
| B09DN9 | 7440-41-7 | Beryllium | 10/22/93 | 0.02 | mg/kg | | U |
| B09DN9 | 7440-41-7 | Beryllium | 10/22/93 | 0.02 | mg/kg | | U |
| B09DN7 | 7440-43-9 | Cadmium | 10/22/93 | 0.91 | mg/kg | | |
| B09DN7 | 7440-43-9 | Cadmium | 10/22/93 | 0.91 | mg/kg | | |
| B09DN8 | 7440-43-9 | Cadmium | 10/22/93 | 0.93 | mg/kg | | |
| B09DN8 | 7440-43-9 | Cadmium | 10/22/93 | 0.93 | mg/kg | | |
| B09DN9 | 7440-43-9 | Cadmium | 10/22/93 | 4.9 | mg/kg | | |
| B09DN9 | 7440-43-9 | Cadmium | 10/22/93 | 4.9 | mg/kg | | |
| B09LQ0 | 7440-43-9 | Cadmium | 10/22/93 | 5 | ug/L | U | |
| B09LQ0 | 7440-43-9 | Cadmium | 10/22/93 | 5 | ug/L | U | |
| B09DN7 | 7440-70-2 | Calcium | 10/22/93 | 1950 | mg/kg | | |
| B09DN7 | 7440-70-2 | Calcium | 10/22/93 | 1950 | mg/kg | | |
| B09DN8 | 7440-70-2 | Calcium | 10/22/93 | 1490 | mg/kg | | |

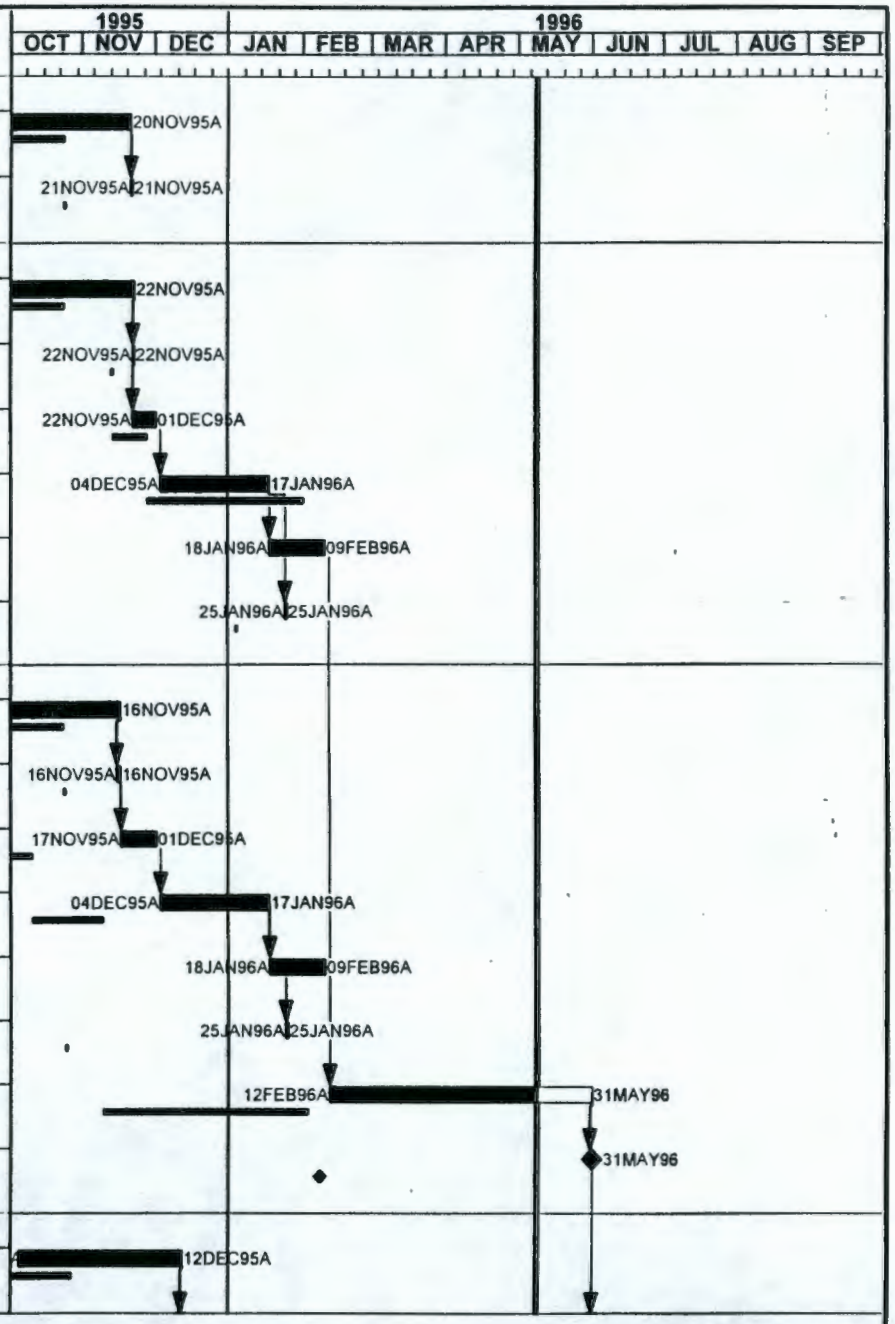
| SAMPLE | CAS # | ANALYTE | DATE | RESULT | UNITS | QUAL | QUAL2 |
|---|---|---|---|---|---|---|---|
| B09DN8 | 7440-70-2 | Calcium | 10/22/93 | 1490 | mg/kg | | |
| B09DN9 | 7440-70-2 | Calcium | 10/22/93 | 1320 | mg/kg | | |
| B09DN9 | 7440-70-2 | Calcium | 10/22/93 | 1320 | mg/kg | | |
| B09DN7 | 7440-47-3 | Chromium | 10/22/93 | 33.2 | mg/kg | N | |
| B09DN7 | 7440-47-3 | Chromium | 10/22/93 | 33.2 | mg/kg | N | |
| B09DN8 | 7440-47-3 | Chromium | 10/22/93 | 32.1 | mg/kg | N | |
| B09DN8 | 7440-47-3 | Chromium | 10/22/93 | 32.1 | mg/kg | N | |
| B09DN9 | 7440-47-3 | Chromium | 10/22/93 | 32.5 | mg/kg | E | |
| B09DN9 | 7440-47-3 | Chromium | 10/22/93 | 32.5 | mg/kg | E | |
| B09LQ0 | 7440-47-3 | Chromium | 10/22/93 | 10 | ug/L | U | |
| B09LQ0 | 7440-47-3 | Chromium | 10/22/93 | 10 | ug/L | U | |
| B09DN7 | 7440-48-4 | Cobalt | 10/22/93 | 2.1 | mg/kg | | B |
| B09DN7 | 7440-48-4 | Cobalt | 10/22/93 | 2.1 | mg/kg | | B |
| B09DN8 | 7440-48-4 | Cobalt | 10/22/93 | 1.9 | mg/kg | | B |
| B09DN8 | 7440-48-4 | Cobalt | 10/22/93 | 1.9 | mg/kg | | B |
| B09DN9 | 7440-48-4 | Cobalt | 10/22/93 | 1.4 | mg/kg | | B |
| B09DN9 | 7440-48-4 | Cobalt | 10/22/93 | 1.4 | mg/kg | | B |
| B09DN7 | 7440-50-8 | Copper | 10/22/93 | 19.6 | mg/kg | | |
| B09DN7 | 7440-50-8 | Copper | 10/22/93 | 19.6 | mg/kg | | |
| B09DN8 | 7440-50-8 | Copper | 10/22/93 | 18.9 | mg/kg | | |
| B09DN8 | 7440-50-8 | Copper | 10/22/93 | 18.9 | mg/kg | | |
| B09DN9 | 7440-50-8 | Copper | 10/22/93 | 20.8 | mg/kg | N | |
| B09DN9 | 7440-50-8 | Copper | 10/22/93 | 20.8 | mg/kg | N | |
| B09DN7 | ALPHA | Gross alpha | 10/22/93 | 7.7 | pCi/g | J | |
| B09DN7 | BETA | Gross beta | 10/22/93 | 9.6 | pCi/g | J | |
| B09DN7 | BETA | Gross beta | 10/22/93 | 9.6 | pCi/g | J | |
| B09DN7 | ALPHA | Gross alpha | 10/22/93 | 7.7 | pCi/g | J | |
| B09DN8 | ALPHA | Gross alpha | 10/22/93 | 5.6 | pCi/g | J | |
| B09DN8 | BETA | Gross beta | 10/22/93 | 12 | pCi/g | | |
| B09DN8 | ALPHA | Gross alpha | 10/22/93 | 5.6 | pCi/g | J | |
| B09DN8 | BETA | Gross beta | 10/22/93 | 12 | pCi/g | | |
| B09DN7 | 7439-89-6 | Iron | 10/22/93 | 3140 | mg/kg | | |
| B09DN7 | 7439-89-6 | Iron | 10/22/93 | 3140 | mg/kg | | |
| B09DN8 | 7439-89-6 | Iron | 10/22/93 | 2290 | mg/kg | | |
| B09DN8 | 7439-89-6 | Iron | 10/22/93 | 2290 | mg/kg | | |
| B09DN9 | 7439-89-6 | Iron | 10/22/93 | 1970 | mg/kg | | |
| B09DN9 | 7439-89-6 | Iron | 10/22/93 | 1970 | mg/kg | | |
| B09DN7 | 7439-92-1 | Lead | 10/22/93 | 113 | mg/kg | E | |
| B09DN7 | 7439-92-1 | Lead | 10/22/93 | 113 | mg/kg | E | |
| B09DN8 | 7439-92-1 | Lead | 10/22/93 | 111 | mg/kg | E | |
| B09DN8 | 7439-92-1 | Lead | 10/22/93 | 111 | mg/kg | E | |
| B09DN9 | 7439-92-1 | Lead | 10/22/93 | 109 | mg/kg | | |
| B09DN9 | 7439-92-1 | Lead | 10/22/93 | 109 | mg/kg | | |
| B09LQ0 | 7439-92-1 | Lead | 10/22/93 | 90 | ug/L | U | |
| B09LQ0 | 7439-92-1 | Lead | 10/22/93 | 90 | ug/L | U | |

| SAMPLE | CAS # | ANALYTE | DATE | RESULT | UNITS | QUAL | QUAL2 |
|---|---|---|---|---|---|---|---|
| B09DN7 | 7439-95-4 | Magnesium | 10/22/93 | 731 | mg/kg | | |
| B09DN7 | 7439-95-4 | Magnesium | 10/22/93 | 731 | mg/kg | | |
| B09DN8 | 7439-95-4 | Magnesium | 10/22/93 | 572 | mg/kg | | B |
| B09DN8 | 7439-95-4 | Magnesium | 10/22/93 | 572 | mg/kg | | B |
| B09DN9 | 7439-95-4 | Magnesium | 10/22/93 | 498 | mg/kg | | B |
| B09DN9 | 7439-95-4 | Magnesium | 10/22/93 | 498 | mg/kg | | B |
| B09DN7 | 7439-96-5 | Manganese | 10/22/93 | 43.3 | mg/kg | EN | |
| B09DN7 | 7439-96-5 | Manganese | 10/22/93 | 43.3 | mg/kg | EN | |
| B09DN8 | 7439-96-5 | Manganese | 10/22/93 | 33.1 | mg/kg | EN | |
| B09DN8 | 7439-96-5 | Manganese | 10/22/93 | 33.1 | mg/kg | EN | |
| B09DN9 | 7439-96-5 | Manganese | 10/22/93 | 26.2 | mg/kg | | |
| B09DN9 | 7439-96-5 | Manganese | 10/22/93 | 26.2 | mg/kg | | |
| B09DN7 | 7439-97-6 | Mercury | 10/22/93 | 0.06 | mg/kg | | U |
| B09DN7 | 7439-97-6 | Mercury | 10/22/93 | 0.06 | mg/kg | | U |
| B09DN8 | 7439-97-6 | Mercury | 10/22/93 | 0.06 | mg/kg | | U |
| B09DN8 | 7439-97-6 | Mercury | 10/22/93 | 0.06 | mg/kg | | U |
| B09LQ0 | 7439-97-6 | Mercury | 10/22/93 | 0.2 | ug/L | U | |
| B09LQ0 | 7439-97-6 | Mercury | 10/22/93 | 0.2 | ug/L | U | |
| B09DN7 | 7440-02-0 | Nickel | 10/22/93 | 829 | mg/kg | | |
| B09DN7 | 7440-02-0 | Nickel | 10/22/93 | 829 | mg/kg | | |
| B09DN8 | 7440-02-0 | Nickel | 10/22/93 | 897 | mg/kg | | |
| B09DN8 | 7440-02-0 | Nickel | 10/22/93 | 897 | mg/kg | | |
| B09DN9 | 7440-02-0 | Nickel | 10/22/93 | 879 | mg/kg | | |
| B09DN9 | 7440-02-0 | Nickel | 10/22/93 | 879 | mg/kg | | |
| B09DN9 | PH | pH Measurement | 10/22/93 | 9.4 | pH | | |
| B09DN9 | PH | pH Measurement | 10/22/93 | 9.4 | pH | | |
| B09DN7 | 7440-09-7 | Potassium | 10/22/93 | 178 | mg/kg | | B |
| B09DN7 | 13966-00-2 | Potassium-40 | 10/22/93 | 0.76 | pCi/g | | |
| B09DN7 | 7440-09-7 | Potassium | 10/22/93 | 178 | mg/kg | | B |
| B09DN7 | 13966-00-2 | Potassium-40 | 10/22/93 | 0.76 | pCi/g | | |
| B09DN8 | 13966-00-2 | Potassium-40 | 10/22/93 | 0.66 | pCi/g | | |
| B09DN8 | 7440-09-7 | Potassium | 10/22/93 | 152 | mg/kg | | B |
| B09DN8 | 7440-09-7 | Potassium | 10/22/93 | 152 | mg/kg | | B |
| B09DN8 | 13966-00-2 | Potassium-40 | 10/22/93 | 0.66 | pCi/g | | |
| B09DN9 | 7440-09-7 | Potassium | 10/22/93 | 138 | mg/kg | | B |
| B09DN9 | 7440-09-7 | Potassium | 10/22/93 | 138 | mg/kg | | B |
| B09DN7 | 13982-63-3 | Radium-226 | 10/22/93 | 0.093 | pCi/g | J | |
| B09DN7 | 15262-20-1 | Radium-228 | 10/22/93 | 0.15 | pCi/g | J | |
| B09DN7 | 15262-20-1 | Radium-228 | 10/22/93 | 0.15 | pCi/g | J | |
| B09DN7 | 13982-63-3 | Radium-226 | 10/22/93 | 0.093 | pCi/g | J | |
| B09DN7 | 7782-49-2 | Selenium | 10/22/93 | 13.4 | mg/kg | | U |
| B09DN7 | 7782-49-2 | Selenium | 10/22/93 | 13.4 | mg/kg | | U |
| B09DN8 | 7782-49-2 | Selenium | 10/22/93 | 16.1 | mg/kg | W | B |
| B09DN8 | 7782-49-2 | Selenium | 10/22/93 | 16.1 | mg/kg | W | B |

| SAMPLE | CAS # | ANALYTE | DATE | RESULT | UNITS | QUAL | QUAL2 |
|---|---|---|---|---|---|---|---|
| B09DN9 | 7782-49-2 | Selenium | 10/22/93 | 8.8 | mg/kg | +* | |
| B09DN9 | 7782-49-2 | Selenium | 10/22/93 | 8.8 | mg/kg | +* | |
| B09LQ0 | 7782-49-2 | Selenium | 10/22/93 | 100 | ug/L | U | |
| B09LQ0 | 7782-49-2 | Selenium | 10/22/93 | 100 | ug/L | U | |
| B09DN7 | 7440-22-4 | Silver | 10/22/93 | 0.43 | mg/kg | N | U |
| B09DN7 | 7440-22-4 | Silver | 10/22/93 | 0.43 | mg/kg | N | U |
| B09DN8 | 7440-22-4 | Silver | 10/22/93 | 0.43 | mg/kg | N | U |
| B09DN8 | 7440-22-4 | Silver | 10/22/93 | 0.43 | mg/kg | N | U |
| B09DN9 | 7440-22-4 | Silver | 10/22/93 | 0.5 | mg/kg | N | B |
| B09DN9 | 7440-22-4 | Silver | 10/22/93 | 0.5 | mg/kg | N | B |
| B09LQ0 | 7440-22-4 | Silver | 10/22/93 | 10 | ug/L | U | |
| B09LQ0 | 7440-22-4 | Silver | 10/22/93 | 10 | ug/L | U | |
| B09DN7 | 7440-23-5 | Sodium | 10/22/93 | 8860 | mg/kg | | |
| B09DN7 | 7440-23-5 | Sodium | 10/22/93 | 8860 | mg/kg | | |
| B09DN8 | 7440-23-5 | Sodium | 10/22/93 | 7400 | mg/kg | | |
| B09DN8 | 7440-23-5 | Sodium | 10/22/93 | 7400 | mg/kg | | |
| B09DN9 | 7440-23-5 | Sodium | 10/22/93 | 7820 | mg/kg | | |
| B09DN9 | 7440-23-5 | Sodium | 10/22/93 | 7820 | mg/kg | | |
| B09DN7 | 7440-28-0 | Thallium | 10/22/93 | 0.26 | mg/kg | | U |
| B09DN7 | 7440-28-0 | Thallium | 10/22/93 | 0.26 | mg/kg | | U |
| B09DN8 | 7440-28-0 | Thallium | 10/22/93 | 0.26 | mg/kg | | U |
| B09DN8 | 7440-28-0 | Thallium | 10/22/93 | 0.26 | mg/kg | | U |
| B09DN9 | 7440-28-0 | Thallium | 10/22/93 | 0.44 | mg/kg | | U |
| B09DN9 | 7440-28-0 | Thallium | 10/22/93 | 0.44 | mg/kg | | U |
| B09DN7 | TH-232 | Thorium-232 | 10/22/93 | 0.15 | pCi/g | | |
| B09DN7 | TH-232 | Thorium-232 | 10/22/93 | 0.15 | pCi/g | | |
| B09DN7 | 14274-82-9 | Thorium-228 | 10/22/93 | 0.082 | pCi/g | | |
| B09DN7 | 14274-82-9 | Thorium-228 | 10/22/93 | 0.082 | pCi/g | | |
| B09DN8 | 14274-82-9 | Thorium-228 | 10/22/93 | 0.061 | pCi/g | | |
| B09DN8 | 14274-82-9 | Thorium-228 | 10/22/93 | 0.061 | pCi/g | | |
| B09DN7 | 7440-61-1 | Uranium (elemental) | 10/22/93 | 58 | ug/g | X | |
| B09DN7 | 7440-61-1 | Uranium (elemental) | 10/22/93 | 58 | ug/g | X | |
| B09DN8 | 7440-61-1 | Uranium (elemental) | 10/22/93 | 30 | ug/g | X | |
| B09DN8 | 7440-61-1 | Uranium (elemental) | 10/22/93 | 30 | ug/g | X | |
| B09DN7 | 7440-62-2 | Vanadium | 10/22/93 | 0.3 | mg/kg | N | U |
| B09DN7 | 7440-62-2 | Vanadium | 10/22/93 | 0.3 | mg/kg | N | U |
| B09DN8 | 7440-62-2 | Vanadium | 10/22/93 | 0.3 | mg/kg | N | U |
| B09DN8 | 7440-62-2 | Vanadium | 10/22/93 | 0.3 | mg/kg | N | U |
| B09DN9 | 7440-62-2 | Vanadium | 10/22/93 | 0.3 | mg/kg | N | U |
| B09DN9 | 7440-62-2 | Vanadium | 10/22/93 | 0.3 | mg/kg | N | U |
| B09DN7 | 7440-66-6 | Zinc | 10/22/93 | 27.2 | mg/kg | | |
| B09DN7 | 7440-66-6 | Zinc | 10/22/93 | 27.2 | mg/kg | | |
| B09DN8 | 7440-66-6 | Zinc | 10/22/93 | 24.8 | mg/kg | | |
| B09DN8 | 7440-66-6 | Zinc | 10/22/93 | 24.8 | mg/kg | | |
| B09DN9 | 7440-66-6 | Zinc | 10/22/93 | 28.2 | mg/kg | N | |

| SAMPLE | CAS # | ANALYTE | DATE | RESULT | UNITS | QUAL | QUAL2 |
|---|---|---|---|---|---|---|---|
| B09DN9 | 7440-66-6 | Zinc | 10/22/93 | 28.2 | mg/kg | N | |

| Activity ID | Activity Description | TPCN | % | Target Finish |
|---|---|---|---|---|
| **FY95 CARRYOVER ACTIVITIES-FS III DOCUMENT** | | | | |
| 3A0050 | REWRITE - INCORPORATE COMMENTS IN FS III | P211A | 100 | 23OCT95 |
| 3A0055 | DELIVER FINAL FS III TO DOE | P211A | 100 | 24OCT95 |
| **FY95 CARRYOVER ACTS.-PROCESS TRENCH CLOSURE PLAN** | | | | |
| 3A0400 | INCORPORATE REGULATOR COMMENTS & SUBMIT TO DOE | P211K | 100 | 23OCT95 |
| 3A0405 | TRANSMIT FINAL CLOSURE PLAN TO DOE | P211K | 100 | 13NOV95 |
| 3A0410 | REGULATOR ADVANCED REVIEW PERIOD | P211K | 100 | 27NOV95 |
| 3A0415 | PUBLIC REVIEW | P211K | 100 | 31JAN96 |
| 3A0417 | PUBLIC REVIEW EXTENSION | P211K | 100 | |
| 3A0420 | PUBLIC MEETING | P211K | 100 | 04JAN96 |
| **300-FF-1 PROPOSED PLAN (INC. FY95 CARRYOVER)** | | | | |
| 3A0150 | INCORPORATE REGULATOR COMMENTS AND REVISE | P211G | 100 | 23OCT95 |
| 3A0155 | TRANSMIT FINAL PROPOSED PLAN TO DOE | P211G | 100 | 24OCT95 |
| 3A0160 | REGULATOR ADVANCED REVIEW PERIOD | P211G | 100 | 10OCT95 |
| 3A0165 | PUBLIC REVIEW | P211G | 100 | 09NOV95 |
| 3A0167 | PUBLIC REVIEW EXTENSION | P211G | 100 | |
| 3A0170 | PUBLIC MEETING | P211G | 100 | 25OCT95 |
| 3A0175 | SUPPORT FOR ROD ISSUE | P211G | 95 | 02FEB96 |
| 3A0180 | ISSUE ROD | P211G | 0 | 07FEB96 |
| **PRE-DESIGN REPORT** | | | | |
| 3A0015 | PREPARE DRAFT PRE-DESIGN REPORT | P211M | 100 | 27OCT95 |




| | | | |
|---|---|---|---|
| Project Start | 28AUG95 | Early Bar | |
| Project Finish | 04NOV98 | Target Bar | |
| Data Date | 09MAY96 | Progress Bar | |
| Plot Date | 15MAY96 | Critical Activity | |



FFF1

**ERC - Richland**
**300 - FF - 1**
**Project Review**

Sheet 1 of 4

W Lambert 2-9679

| Date | Revision | Checked | Approved |
|---|---|---|---|
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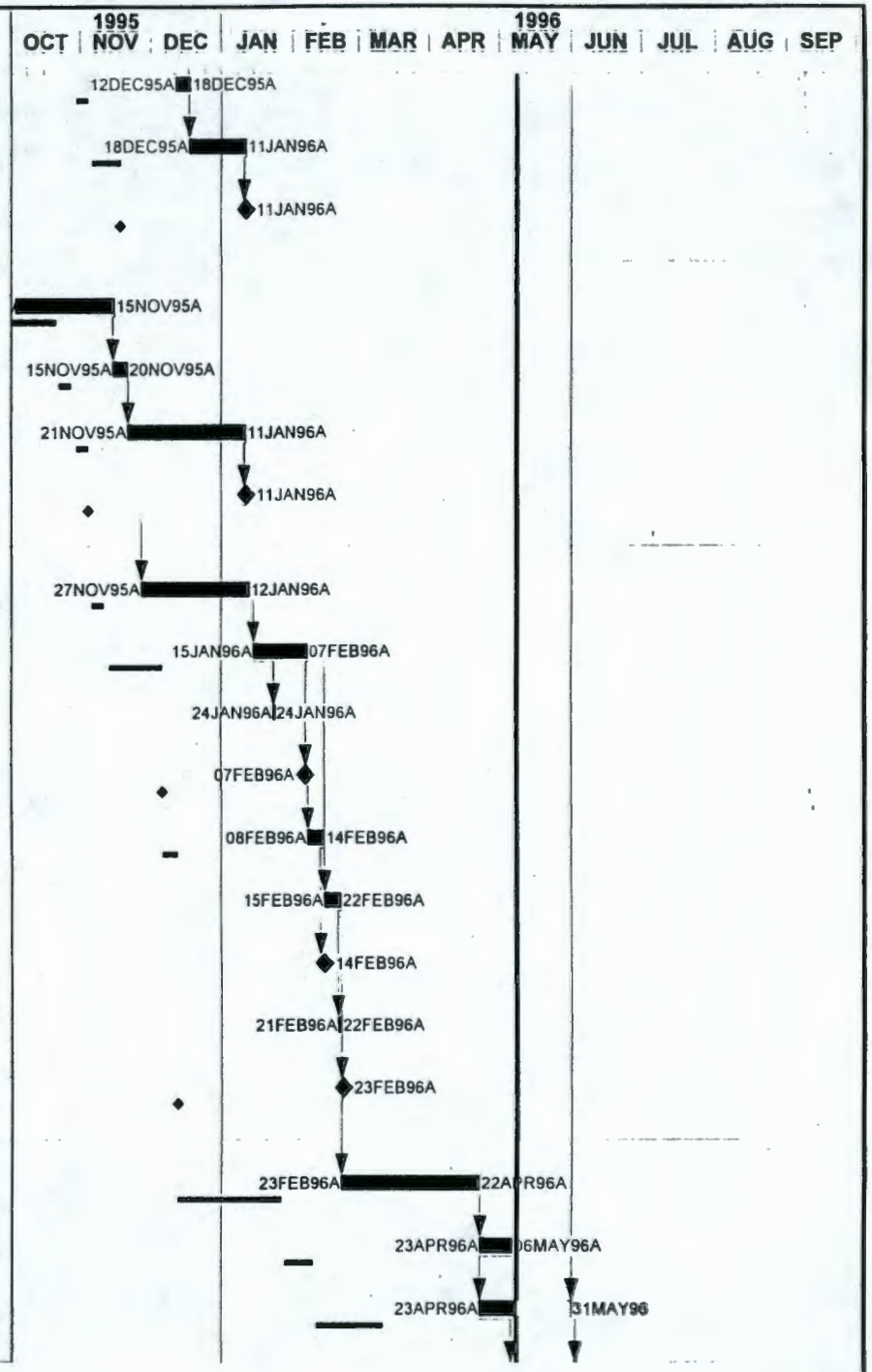
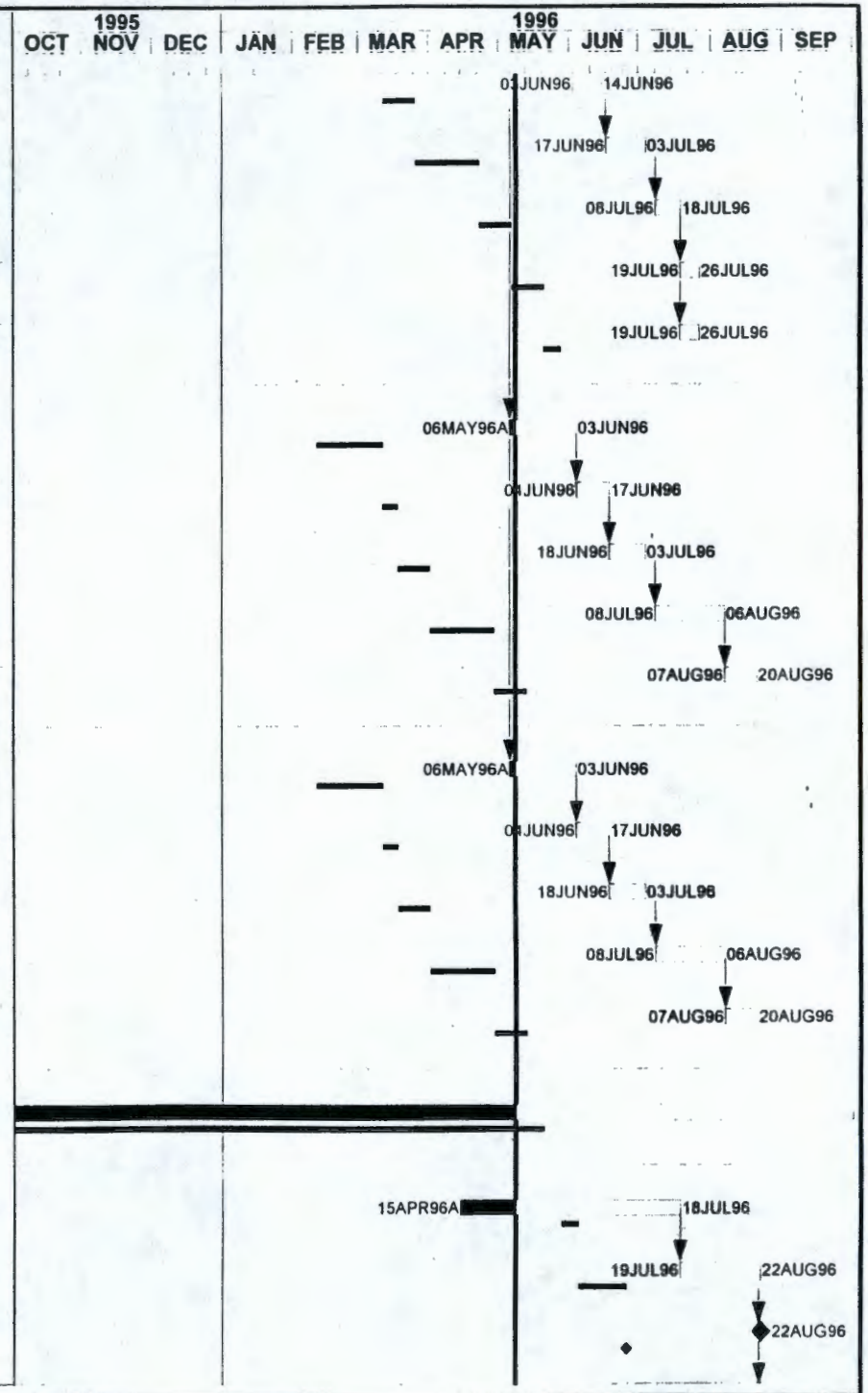
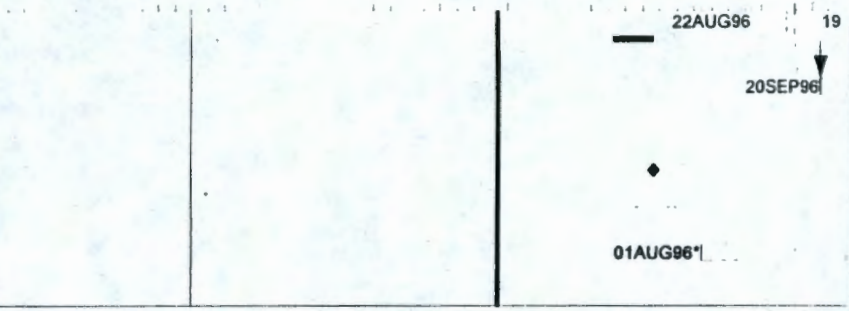
| Activity ID | Activity Description | TPCN | % | Target Finish |
|---|---|---|---|---|
| 3A0020 | ERC REVIEW PRE-DESIGN REPORT | P211M | 100 | 03NOV95 |
| 3A0030 | INCOR COMNTS, OBTN APLS, OF PRE-DGN RPT | P211M | 100 | 17NOV95 |
| 3A0040 | ISSUE PRE-DESIGN REPORT | P211M | 100 | 17NOV95 |
| **ENGINEERING SERVICES BID PACKAGE** | | | | |
| 3A0052 | PREPARE DRAFT TECHNICAL PACKAGE | P21A9 | 100 | 20OCT95 |
| 3A0060 | ERC REVIEW TECHNICAL PACKAGE | P21A9 | 100 | 27OCT95 |
| 3A0070 | INCORPORATE COMMENTS INTO TECHNICAL PACKAGE | P21A9 | 100 | 03NOV95 |
| 3A0080 | ISSUE TO PROCUREMENT | P21A9 | 100 | 03NOV95 |
| **REMEDIAL DESIGN - PROCUREMENT** | | | | |
| 3A0090 | PREPARE/ISSUE RFP FOR ENGINEERING SERVICES | P2110 | 100 | 10NOV95 |
| 3A0100 | BID PERIOD | P2110 | 100 | 05DEC95 |
| 3A0105 | PRE-BID MEETING & SITE VISIT | P2110 | 100 | |
| 3A0110 | RECEIVE PROPOSALS | P2110 | 100 | 05DEC95 |
| 3A0120 | EVALUATE BID PACKAGE | P2110 | 100 | 12DEC95 |
| 3A0102 | BEST AND FINAL BIDDING PERIOD | P2110 | 100 | |
| 3A0125 | RECEIVE FROM DOE, NOTICE TO PROCEED W/RD | P2110 | 100 | |
| 3A0104 | EVALUATE BEST AND FINAL OFFERS | P2110 | 100 | |
| 3A0130 | AWARD SUBCONTRACT | P2110 | 100 | 12DEC95 |
| **REMEDIAL DESIGN ENGINEERING** | | | | |
| 3A0140 | PREPARE 30% DRAFT RDS | P211R | 100 | 26JAN96 |
| 3A0142 | TEAM REVIEW 30% DRAFT | P211R | 100 | 09FEB96 |
| 3A0144 | PREPARE 60% DRAFT RD | P211R | 40 | 11MAR96 |



| Activity ID | Activity Description | TPCN | % | Target Finish |
|---|---|---|---|---|
| 3A0146 | TEAM REVIEW - 60% DRAFT | P211R | 0 | 25MAR96 |
| 3A0148 | PREPARE 90% DRAFT RD | P211R | 0 | 22APR96 |
| 3A0190 | TEAM REVIEW OF 90% DRAFT | P211R | 0 | 06MAY96 |
| 3A0192 | PREPARE & ISSUE 100% RD PACKAGE | P211R | 0 | 20MAY96 |
| 3A0280 | PREPARE & ISSUE CONSTRUCTION BID PACKAGE | P211R | 0 | 28MAY96 |
| **REMEDIAL DESIGN REPORT** | | | | |
| 3A0194 | PREPARE RD REPORT | P21A5 | 5 | 11MAR96 |
| 3A0196 | ERC REVIEW RD REPORT | P21A5 | 0 | 18MAR96 |
| 3A0198 | PREPARE DRAFT A RD REPORT | P21A5 | 0 | 01APR96 |
| 3A0200 | CONCURRENT REGULATOR AND DOE REVIEW RD REPORT | P21A5 | 0 | 29APR96 |
| 3A0206 | PREPARE & ISSUE RD REPORT REV 0 | P21A5 | 0 | 13MAY96 |
| **REMEDIAL ACTION WORK PLAN** | | | | |
| 3A0218 | PREPARE RA WORK PLAN | P21A6 | 5 | 11MAR96 |
| 3A0220 | ERC REVIEW RAWP | P21A6 | 0 | 18MAR96 |
| 3A0230 | PREPARE DRAFT A RA WORK PLAN | P21A6 | 0 | 01APR96 |
| 3A0240 | CONCURRENT REGULATOR AND DOE REVIEW RA WORK PLAN | P21A6 | 0 | 29APR96 |
| 3A0270 | PREPARE & ISSUE RAWP REV. 0 | P21A6 | 0 | 13MAY96 |
| **SURVEILLANCE & MAINTENANCE** | | | | |
| 3A0271 | SURVEILLANCE & MAINTENANCE | P211N | 63 | 20MAY96 |
| **REMEDIAL ACTION PROCUREMENT** | | | | |
| 3A0290 | PREPARE/ISSUE RFP FOR REMEDIAL ACTION | P21C1 | 5 | 04JUN96 |
| 3A0300 | BID PERIOD | P21C1 | 0 | 25JUN96 |
| 3A0310 | RECEIVE PROPOSALS | P21C1 | 0 | 25JUN96 |



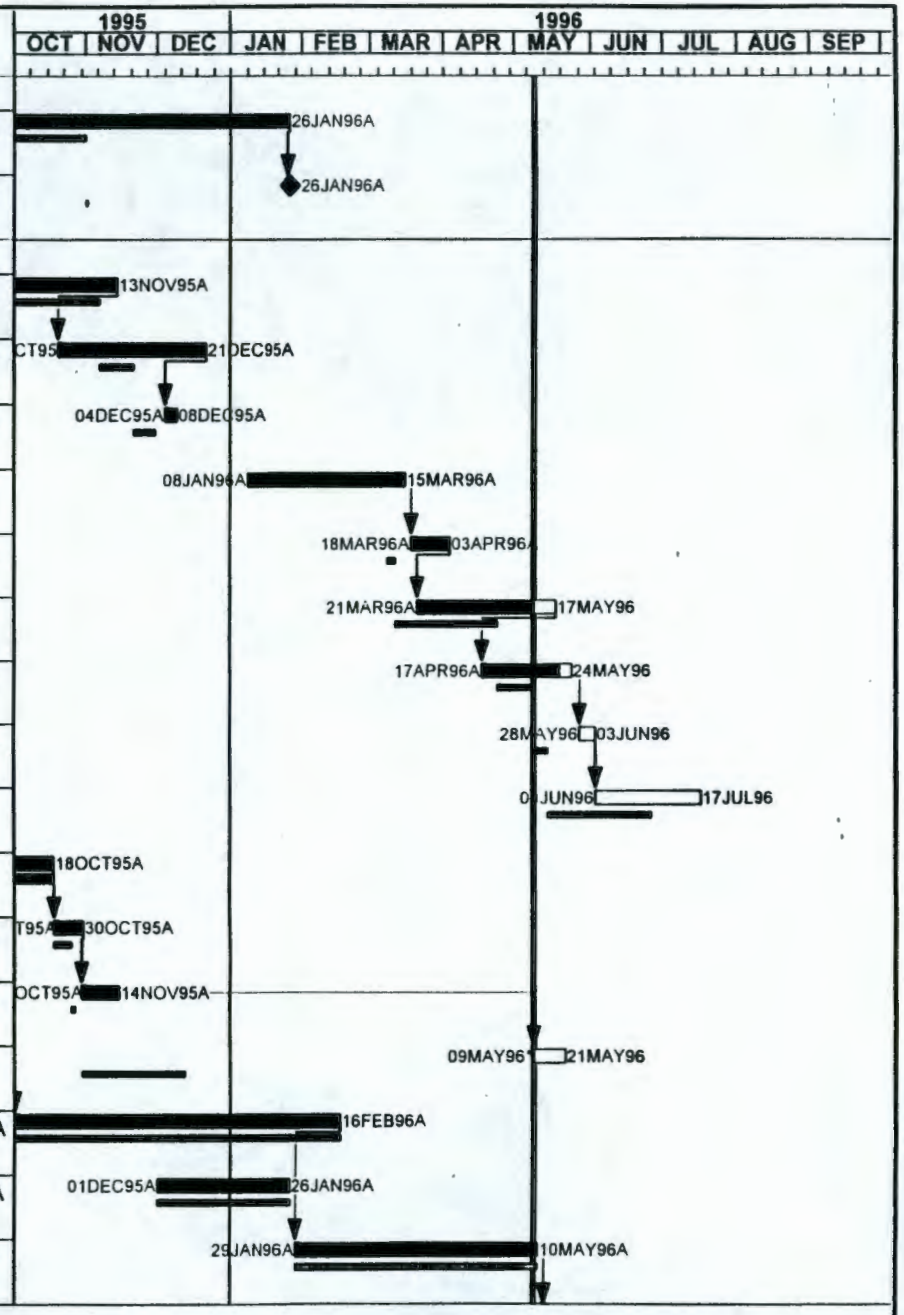
| Activity ID | Activity Description | TPCN | % | Target Finish |
|---|---|---|---|---|
| 3A0320 | EVALUATE BIDS | P21C1 | 0 | 11JUL96 |
| 3A0325 | RECEIVE APPROVAL FROM DOE | P21C1 | 0 | |
| 3A0330 | AWARD SUBCONTRACT | P21C1 | 0 | 11JUL96 |
| **IMPLEMENT REMEDIAL ACTION** | | | | |
| 3A0335 | PLANNING FOR REMEDIAL ACTION | P21C2 | 0 | |



| Activity ID | Activity Description | TPCN | % | Target Finish |
|---|---|---|---|---|
| 3A0320 | EVALUATE BIDS | P21C1 | 0 | 11JUL96 |
| 3A0325 | RECEIVE APPROVAL FROM DOE | P21C1 | 0 | |
| 3A0330 | AWARD SUBCONTRACT | P21C1 | 0 | 11JUL96 |
| **IMPLEMENT REMEDIAL ACTION** | | | | |
| 3A0335 | PLANNING FOR REMEDIAL ACTION | P21C2 | 0 | |


9613492.7679

| Activity ID | Activity Description | TPCN | % | Target Finish |
|---|---|---|---|---|
| **FY95 CARRYOVER ACTIVITIES - WORKPLAN** | | | | |
| 3B0050 | PREPARE REV. 0 WORK PLAN (DQO REPORT) | P221A | 100 | 31OCT95 |
| 3B0055 | DELIVER TO DOE | P221A | 100 | 01NOV95 |
| **CHARACTERIZATION - TASK 1P22130A0A** | | | | |
| 3B0161 | GW FIRST ROUND - SAMPLE ANALYSIS | P22AD | 100 | 06NOV95 |
| 3B0162 | GW FIRST ROUND - TECHNICAL EVALUATION | P22AD | 100 | 20NOV95 |
| 3B0164 | GW FIRST ROUND - DATA MANAGEMENT | P22AD | 100 | 29NOV95 |
| 3B0168 | GW SECOND ROUND PLANNING | P22AE | 100 | |
| 3B0170 | GW SAMPLING - SECOND ROUND | P22AE | 100 | 11MAR96 |
| 3B0171 | GW SECOND ROUND - SAMPLE ANALYSIS | P22AE | 85 | 23APR96 |
| 3B0172 | GW SECOND ROUND - TECHNICAL EVALUATION | P22AE | 25 | 07MAY96 |
| 3B0174 | GW SECOND ROUND - DATA MANAGEMENT | P22AE | 0 | 14MAY96 |
| 3B0175 | GW SAMPLE DISPOSAL | P22AE | 0 | 26JUN96 |
| 3B0210 | SOIL SAMPLE ANALYSIS | P22AF | 100 | 18OCT95 |
| 3B0212 | SOIL SAMPLE - TECHNICAL EVALUATION | P22AF | 100 | 25OCT95 |
| 3B0214 | SOIL SAMPLE - DATA MANAGEMENT | P22AF | 100 | 27OCT95 |
| 3B0216 | SOIL SAMPLE - DISPOSAL | P22AF | 0 | 12DEC95 |
| 3B0235 | PREPARE DRAFT LFI REPORT | P22AG | 100 | 16FEB96A |
| 3B0237 | DQO SUMMARY REPORT | P22AG | 100 | 26JAN96A |
| 3B0700 | PREPARE DRAFT LFI(WP) REPORT | P22AG | 100 | 10MAY96 |




| | | | |
|---|---|---|---|
| Project Start | 28AUG95 | Early Bar | |
| Project Finish | 02MAR99 | Target Bar | |
| Data Date | 09MAY96 | Progress Bar | |
| Plot Date | 16MAY96 | Critical Activity | |



FFF2

**ERC - Richland**
**300 - FF - 2**
**Project Review**

Sheet 1 of 2

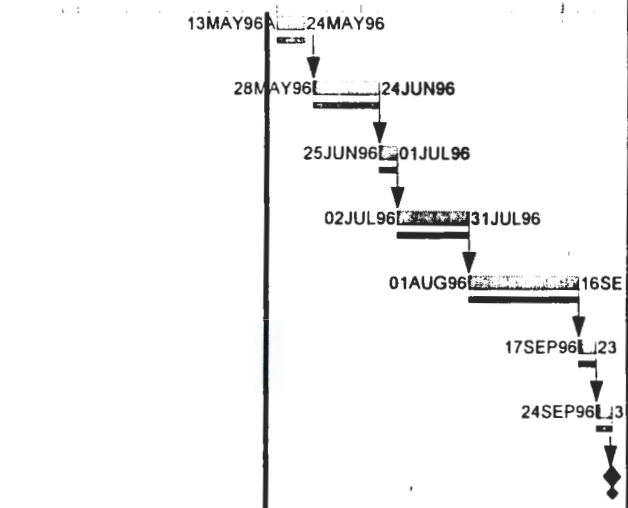
W Lambert 2-9079

| Date | Revision | Checked | Approved |
|---|---|---|---|
| | | | |

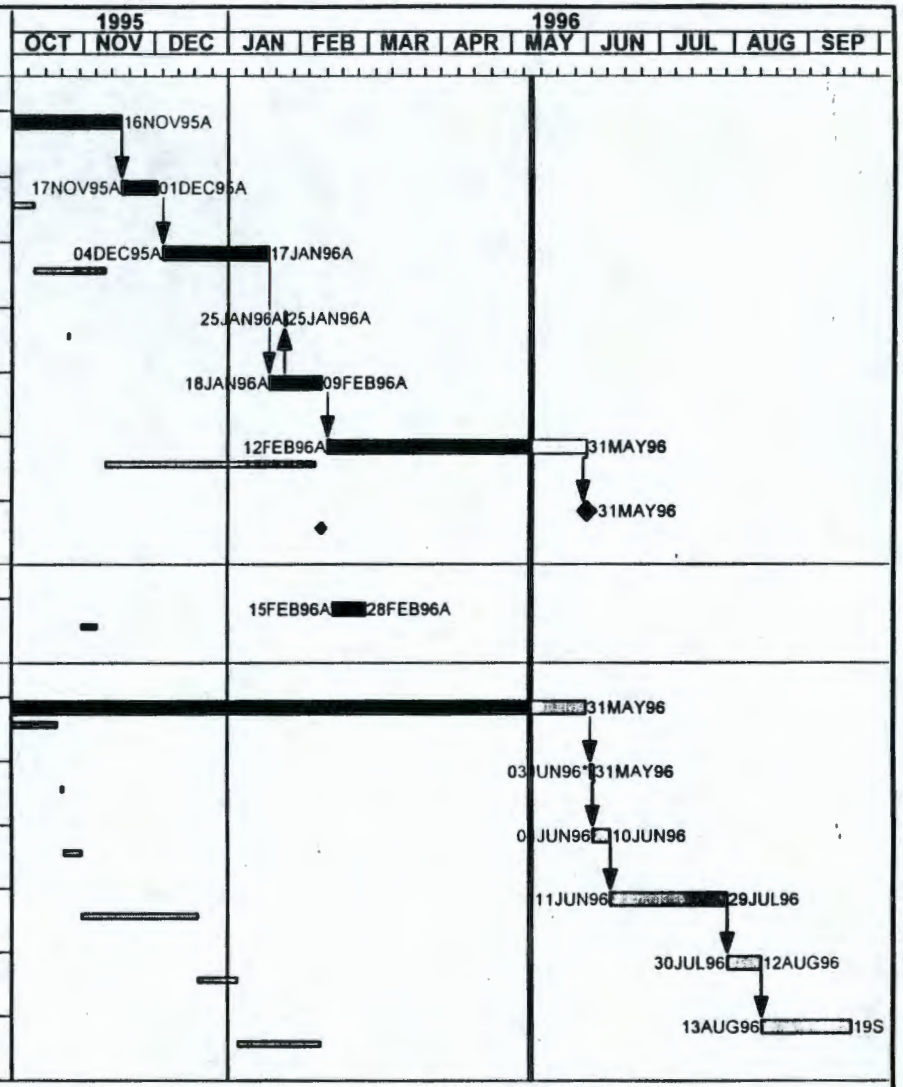


Attachment 7

| Activity ID | Activity Description | TPCN | % | Target Finish |
|---|---|---|---|---|
| 3B0710 | LFI DRAFT ERC INTERNAL REVIEW | P22AG | 50 | 24MAY96 |
| 3B0715 | INCORP. ERC COMMENTS & ISSUE DECISIONAL DRAFT | P22AG | 0 | 24JUN96 |
| 3B0716 | ERC TRANSMIT DEC. DRAFT FOR DOE REVIEW | P22AG | 0 | 01JUL96 |
| 3B0717 | DOE REVIEW OF LFI | P22AG | 0 | 31JUL96 |
| 3B0718 | INCORP. DOE COMMENTS & PREP. DRAFT A | P22AG | 0 | 16SEP96 |
| 3B0719 | TRANSMIT DRAFT A TO DOE | P22AG | 0 | 23SEP96 |
| 3B0720 | DOE TRANSMITS DRAFT A FOR REGULATOR REVIEW | P22AG | 0 | 30SEP96 |
| 3B0722 | DOE DELIVERS LFI (DRAFT A) TO REGULATORS | P22AG | 0 | 30SEP96 |



| Activity ID | Activity Description | TPCN | % | Target Finish |
|---|---|---|---|---|
| **300-FF-5 PROPOSED PLAN** | | | | |
| 3C0002 | INCORPORATE COMMENTS & ISSUE FINAL PLAN TO DOE | P2541 | 100 | |
| 3C0004 | REGULATOR ADVANCED REVIEW PERIOD | P2541 | 100 | 10OCT95 |
| 3C0005 | PUBLIC REVIEW | P2541 | 100 | 09NOV95 |
| 3C0006 | PUBLIC MEETING | P2541 | 100 | 25OCT95 |
| 3C0007 | PUBLIC REVIEW EXTENSION | P2541 | 100 | |
| 3C0008 | SUPPORT FOR ROD ISSUE | P2541 | 95 | 06FEB96 |
| 3C0009 | ISSUE ROD | P2541 | 0 | 09FEB96 |
| **O&M PLAN (FY95 CARRYOVER)** | | | | |
| 3C0827 | HOLD DQO SESSION | P2543 | 100 | 06NOV95 |
| **OPERATION & MAINTENANCE PLAN** | | | | |
| 3C0012 | ADDRESS DOE COMMENTS | P2545 | 99 | 20OCT95 |
| 3C0016 | TRANSMIT TO DOE | P2545 | 0 | 23OCT95 |
| 3C0020 | DOE TRANSMIT TO REGULATORS | P2545 | 0 | 30OCT95 |
| 3C0024 | REGULATOR REVIEW | P2545 | 0 | 18DEC95 |
| 3C0026 | INCORPORATE REGULATOR COMMENTS | P2545 | 0 | 04JAN96 |
| 3C0028 | REVISE & ISSUE O&M PLAN | P2545 | 0 | 09FEB96 |




| | | | | |
|---|---|---|---|---|
| Project Start | 28AUG95 | Early Bar | FFF8 | Sheet 1 of 1 |
| Project Finish | 20SEP96 | Target Bar | ERC - Richland | |
| Data Date | 09MAY96 | Progress Bar | 300 - FF - 5 | |
| Plot Date | 15MAY96 | Critical Activity | Project Review | |



W Lambert 3-9079

| Date | Revision | Checked | Approved |
|---|---|---|---|
| | | | |

**Distribution**
**Unit Managers' Meeting: Remedial Action Unit/Source Operable Units**
**100, 200, and 300 Areas**

Nancy Werdel ..... DOE-RL, RP (H0-12)
Mike Thompson ..... DOE-RL, RP (H0-12)
Glenn Goldberg ..... DOE-RL, RP (H0-12)
John Murphy ..... DOE-RL, RP (H0-12)
Rich Holten ..... DOE-RL, RP (H0-12)
Nicole Kimball ..... DOE-RL, RP (H0-12)
Bryan Foley ..... DOE-RL, RP (H0-12)
Robert McLeod ..... DOE-RL-ERD (H0-12)
Ellen Mattlin ..... DOE-RL, EAP (A5-15)

Lisa Treichel ..... DOE-HQ (EM-442)
Steve Balone ..... DOE-HQ (EM-442)

Dennis Faulk ..... 100 Aggregate Area Manager, EPA (B5-01)
David Einan ..... EPA (B5-01)
Paul Beaver ..... EPA (B5-01)
Larry Gadbois ..... EPA (B5-01)
Kevin Oates ..... EPA (B5-01)

Phil Staats ..... 100 Aggregate Area Manager, WDOE (B5-18)
Chuck Cline ..... WDOE (Lacey)
Wayne Soper ..... WDOE (Kennewick) (B5-18)
Ted Wooley ..... WDOE (Kennewick) (B5-18)
Gary Freedman ..... WDOE (Kennewick) (B5-18)
Norman Hepner ..... WDOE (Kennewick) (B5-18)
David Holland ..... WDOE (Kennewick) (B5-18)
Keith Holliday ..... WDOE (Kennewick) (B5-18)

Lynn Albin ..... Washington Dept. of Health

V. R. Dronen ..... (H0-17)
G. O. Gesell ..... (H0-17)
T. L. Lundquist ..... (H0-17)
J. R. James ..... (H0-17)
G. E. Van Sickle ..... (H0-17)
G. B. Mitchem ..... (H0-17)
C. R. Johnson ..... (H0-17)
R. A. Carlson ..... (H0-17)
L. C. Hulstrom ..... (H9-11)
M. J. Galgoul ..... (H9-12)
Alvina Goforth ..... BHI DIS (H0-09) Kay KimmelMAC (B1-42)
T. M. Wintczak ..... BHI (H0-11)
Andrea Hopkins ..... BHI (H9-11)
Tom Page (Please route to:) ..... PNNL (K9-18)
Cheryl Thornhill ..... PNNL (K9-14)
Mark Hanson ..... PNNL (K9-02)
Steve Slate ..... PNNL (K9-14)

Please inform Tamen Lundquist (372-9562) of BHI
of deletions or additions to the distribution list. Attachment #1